## Prediction of optical modulation properties of twisted-nematic liquid-crystal display by improved measurement of Jones matrix

Baiheng Ma, 1,2 Baoli Yao, 1,a) Tong Ye, 1 and Ming Lei3

State Key Laboratory of Transient Optics and Photonics, Xi'an Institute of Optics and Precision

Mechanics, Chinese Academy of Sciences, Xi'an 710119, China

<sup>2</sup>Graduate School of the Chinese Academy of Sciences, Beijing 100039, China

<sup>3</sup>College of Life Science and Shaanxi Key Laboratory of Molecular Biology for Agriculture, Northwest A&F

University, Yangling 712100, People's Republic of China

## **2.** Despejar $X^2$ , $Y^2$ , $Z^2$ , y $W^2$

$$X^{2} = \frac{1}{2} (I_{1} + I_{2} + I_{3} - 1),$$

$$I_{1} = X^{2} + Y^{2},$$

$$I_{2} = X^{2} + Z^{2},$$

$$I_{3} = X^{2} + W^{2}.$$

$$X^{2} + Y^{2} + Z^{2} + W^{2} = 1$$

$$X^{2} = \frac{1}{2} (I_{1} - I_{2} - I_{3} + 1),$$

$$Z^{2} = \frac{1}{2} (I_{2} - I_{1} - I_{3} + 1),$$

$$W^{2} = \frac{1}{2} (I_{3} - I_{1} - I_{2} + 1).$$